



PHOSPHORUS TRICHLORIDE

UN 1809

Shipping Name: Phosphorus trichloride
Other Names: Chloride of phosphorus
Phosphorus chloride
Trichlorophosphine



WARNING! • POISON! BREATHING THE VAPORS CAN KILL YOU! SKIN AND EYE CONTACT CAUSES SEVERE BURNS AND BLINDNESS!

- Firefighting gear (including SCBA) does not provide adequate protection. If exposure occurs, remove and isolate gear immediately and thoroughly decontaminate personnel
- **DO NOT USE WATER! REACTS WITH WATER TO PRODUCE HEAT AND HYDROCHLORIC ACID!**

Hazards:

- Vapors are heavier than air and will collect and stay in low areas
- Container may BLEVE when exposed to fire
- Rapidly corrodes wet metals producing highly flammable hydrogen gas
- Decomposition products upon heating include toxic hydrogen chloride and phosphoric acid

Awareness and Operational Level Training

Response:

- **Do not put yourself in danger by entering a contaminated area to rescue a victim**
- Stay upwind and uphill
- Determine the extent of the problem
- Isolate the area of release or fire and deny entry
- Evacuate or shelter in place the immediate area and downwind for a large release
- Notify local health and fire officials and pollution control agencies
- If material or contaminated runoff enters waterways, notify downstream users of potentially contaminated water

Description:

- Colorless to slightly yellow oily liquid that fumes in moist air
- Pungent, musty disagreeable odor
- Sinks in water and reacts violently in water to form toxic hydrochloric acid and phosphoric acid
- Nonflammable
- Vapors are heavier than air and will collect and stay in low areas
- Produces large amounts of vapor

Operational Level Training Response:

RELEASE, NO FIRE:

- Stop the release if it can be done safely from a distance
- Prevent material and runoff from entering sewers and waterways if it can be done safely well ahead of release
- Use large amounts of water well away from the material to disperse vapors - contain runoff
- Ventilate confined area if it can be done without placing personnel at risk

FIRE:

- Material does not burn; fight surrounding fire with an agent other than water; if water must be used, use it in flooding quantities
- If material is not leaking, cool exposed containers with large quantities of water from unattended equipment or remove intact containers if it can be done safely
- If cooling streams are ineffective (venting sound increases in volume and pitch, tank discolors or shows any signs of deforming), withdraw immediately to a secure location

First Aid:

- **Do not put yourself in danger by entering a contaminated area to rescue a victim**
- **Provide Basic Life Support/CPR as needed**
- **Decontaminate the victim as follows:**
 - ♦ Inhalation - remove the victim to fresh air and give oxygen if available
 - ♦ Skin - remove and isolate contaminated clothing (including shoes) and wash skin with soap and large volumes of water for 15 minutes
 - ♦ Eye - rinse eyes with large volumes of water or saline for 15 minutes
 - ♦ Swallowed - do not make the victim vomit
- Victims should be examined by a physician as soon as possible
- Toxic effects may be delayed
- For skin burns decontaminate with water and apply a clean dry dressing

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